.Expansions and refinements of the draft rules for ground water management area planning.
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A. Some goals that the ground water management process ought to include:

1. Recognition of existing problem areas early - before they result in serious degradation of the resource..

2. Identification (based on population growth patterns and other indicators) of where problems are likely to develop in the future.

3. Encouragement of cooperation among policy making entities at all levels to protect water resources.

4. Protection of the whole water resource - ground water and surface water, shallow and deep aquifers, water quantity and water quality, all users (municipal, industrial, domestic), all sizes (high capacity and low capacity consumers).

B. We are concerned that the draft regulations primarily address areas where there are existing and very serious ground water problems (focusing on aquifer with more than 150 feet of drawdown). By the time an aquifer has achieved over 150 feet of drawdown, it may be too late for many resource management options to work; the human population is already in place and their demand for water may have to be addressed in a fashion that ignores aesthetics, environmental needs or the need for water in surrounding areas. We are therefore proposing a three phase approach to identifying ground water management areas.

Phase 1: A small committee of hydrologic scientists will be appointed to identify areas of concern based on water imbalance. Using available data and flow models, they will identify areas of concern as those which meet one or both of these criteria:

1. Where the existing or projected ground water pumping exceeds the sum of the natural recharge and inflows to an aquifer,

2. Where the average annual ground water discharge to all surface waters (streams, lakes, wetlands and springs) has been reduced by more than 2%.

Phase 2: Areas of concern identified in Phase 1 will be assessed to determine whether they should be identified as ground water management areas (GMAs). The assessing body (undefined herein) gathers existing data, including water levels, surface water flows, inventories of wells, springs, wetlands, and more. If an area meets at least one of the following criteria, it will be designated a GMA.

1. Drawdown of ground water levels in excess of 10% of the saturated thickness of the water supply aquifer in the area.

2. Reduction of average annual baseflow to all surface waters in the area exceeds 2%

3. Ground water withdrawals are causing unacceptable ecological impacts

4. Ground water withdrawals are causing water quality degradation in water supply aquifer

Phase 3: Once a site is identified as a GMA, then the structure and process identified in the draft NR kicks in

C. Phase 1 above is intended to identify areas of concern early. At that time, it is also prudent to provide mechanisms which start ground water users toward minimizing or eliminating overdrafting or other misuses of ground water resources before an area is designated as a GMA.

This can be approached by encouraging (requiring?) communities to use their land use planning responsibilities to protect their ground water by such steps as:

minimizing recharge reduction
limiting the sources of water contamination from ground surface activities
encouraging water conservation water
coordinating runoff reduction programs with steps to augment recharge

Such land use planning and its enforcement should continue to be included in all subsequent phases. It is an integral part of a long range management plan, one that requires coordinated and continued cooperation among all levels of government.